

Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application.

In the Claims:

1. (Currently amended) A nucleic acid-cationic immunoliposome complex comprising i) a cationic liposome, ii) an scFv antibody fragment, and iii) a nucleic acid wherein said nucleic acid-cationic immunoliposome complex is prepared by a method comprising:

a) preparing said antibody fragment;

b) directly conjugating said antibody fragment to said cationic liposome to form a cationic immunoliposome, wherein said conjugation occurs via a sulfur atom which was part of a sulfhydryl group at a carboxy terminus on said antibody fragment prior to said conjugation; and

c) mixing said cationic immunoliposome with said nucleic acid to form said nucleic acid-cationic immunoliposome complex;

wherein said antibody fragment and said cationic liposome are present at a protein:lipid ratio (w:w) in the range of $[[1:5]]$ 1:10 to 1:40 and wherein said nucleic acid and said cationic liposome are present at a nucleic acid:lipid ($\mu\text{g}:\text{nmol}$) ratio in the range of 1:6 to 1:20.

2. (Previously presented) The nucleic acid-cationic immunoliposome complex of claim 1 wherein said antibody fragment is capable of binding to a transferrin receptor.

3. (Original) The nucleic acid-cationic immunoliposome complex of claim 1 wherein said nucleic acid is DNA.

4. (Original) The nucleic acid-cationic immunoliposome complex of claim 1 wherein said nucleic acid encodes a wild type p53.

5-6. (Canceled)

7. (Previously presented) The nucleic acid-cationic immunoliposome complex of claim 1 wherein said sulfur atom is part of a cysteine residue.

8. (Previously presented) The nucleic acid-cationic immunoliposome complex of claim 1 wherein said antibody fragment is covalently bound to dioleoylphosphatidylethanolamine (DOPE) linked to 4-(*p* maleimidophenyl)butyrate (MPB) or other sulfhydryl reacting group.

9-11. (Canceled)

12. (Original) A pharmaceutical composition comprising the nucleic acid-cationic immunoliposome complex of claim 1.

13-68 (Canceled)

69. (Previously presented) The nucleic acid-cationic immunoliposome complex of claim 1, wherein said complex comprises a cationic liposome, an antibody fragment

capable of binding to a transferrin receptor and a nucleic acid complex encoding a wild type p53.

70 - 72. (Canceled)

73. (Previously presented) A nucleic acid-cationic immunoliposome complex comprising i) a cationic liposome, ii) an scFv antibody fragment and iii) a nucleic acid, wherein said antibody fragment is directly conjugated to said liposome via a sulfur atom which was part of a sulfhydryl group at a carboxy terminus on said antibody fragment prior to the formation of the immunoliposome complex.

74. (Canceled).

75. (Previously presented) The nucleic acid-cationic immunoliposome complex of claim 1, wherein said cationic liposome comprises a cationic lipid and a neutral or helper lipid, and wherein said cationic lipid is dioleoyltrimethylammonium-propane (DOTAP) or dimethyldioctadecylammonium bromide (DDAB), and said neutral or helper lipid is dioleoylphosphatidylethanolamine (DOPE) and/or cholesterol.

76. (Previously presented) The nucleic acid-cationic immunoliposome complex of claim 75, wherein said neutral or helper lipid comprises dioleoylphosphatidylethanolamine (DOPE).

77. (New) The nucleic acid-cationic immunoliposome complex of claim 1, wherein said antibody fragment and said cationic liposome are present at a protein:lipid ratio (w:w) in the range of 1:10 to 1:20.

78. (New) The nucleic acid-cationic immunoliposome complex of claim 1, wherein said antibody fragment is a transferrin single chain antibody fragment (TfRscFv).

79. (New) The nucleic acid-cationic immunoliposome complex of claim 1, wherein said antibody fragment is a transferrin single chain antibody fragment (TfRscFv), said antibody fragment and said cationic liposome are present at a protein:lipid ratio (w:w) in the range of 1:10 to 1:20.

80. (New) The nucleic acid-cationic immunoliposome complex of claim 79, wherein said nucleic acid and said cationic liposome are present at a nucleic acid:lipid ($\mu\text{g}:\text{nmol}$) ratio in the range of 1:10 to 1:14.